

**REMARKS**

Claims 4, 13 and 19 have been amended and new claim 23-26 have been added. Accordingly, claims 1-26 are pending in the application.

Claims 1-5, 13 and 19-22 stand rejected under 35 U.S.C. § 102 (b) as anticipated by United States patent number 4,848,525 to Jacot et al. (Jacot). Applicant respectfully traverses the rejection of claim 1. Claims 4, 13 and 19 have been amended and the rejections thereof are believed to be overcome.

The present application relates to an electromagnetic active vibration control system and electromagnetic actuator. The Jacot reference relates to "a plurality of linear actuators pivotally connected between [an] aft body and [a] mounting member. The magnetic actuators support the forward body relative to the mounting member by magnetically supporting the armatures between paired stator cores in each stator," (emphasis added).

Among the claim 1 features of the invention not found in the prior art are "a digital control system for causing a force-linearized flux to be generated in a gap between said armature and said magnetic coil." Because Jacot does not teach or suggest the use of a force-linearized flux, the Jacot reference does not anticipate claim 1 or render it obvious. Therefore, the rejection of claim 1 under 35 U.S.C. § 102 (b) should be withdrawn.

Claims 2 and 3 each depend, directly or indirectly, from claim 1 and incorporate all limitations of claim 1. Therefore, the rejections of claims 2 and 3 should also be withdrawn for at least the reasons given above in relation to claim 1.

Each of claims 4, 13 and 19 now also include the limitation of "a force-linearized flux." Therefore, for at least reasons given above in relation to claim 1, the

rejections of claims 4, 13 and 19 under 35 U.S.C. § 102 (b) are overcome. Also, claims 5 and 20-22 depend, directly or indirectly, from claims 4 and 19 respectively. Therefore, the pending rejections of these claims under 35 U.S.C. § 102 (b) are also overcome.

Claims 5-12 and 14-18 stand rejected under 35 U.S.C. § 103 (a) over Jacot in view of United States patent number 5,000,415 to Sandercock. As acknowledged in the Office Action, Jacot does not teach a digital control system for operating actuators as a function of sensed vibration of a variable-state structure, sensed vibration of a feedforward reference and the variable state of the variable state structure.

In the Office Action, a combination of Jacot with Sandercock is proposed as a remedy to this deficiency. Even accepting, *arguendo*, that the Jacot and Sandercock references might properly be combined, the proposed combination still does not teach or suggest every limitation of the subject claims.

Sandercock relates to a "piezoelectric displacement transducer, and means for linearizing the voltage-displacement characteristic of the piezoelectric displacement transducer with the first and second feedback signals," but does not teach or suggest the "force-linearized flux" of the present invention. Thus neither Jacot (as discussed above) nor Sandercock teaches or suggests this limitation. Therefore, whether taken alone or in combination, the Jacot and Sandercock references do not anticipate claims 5-12 and 14-18 or render them obvious.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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